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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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MAY 1988

SUMMARY

May's small increase in deliveries, though greater than the previous month's essentially flat results, still amounted to only 0.8 percent over last May. The weak deliveries of the past two months contrast with the unusually strong performance of the first quarter, when deliveries had risen more than 5 percent year to year. Year to date, the strong first quarter and weaker April and May average out to an increase of a little more than 3 percent, close to the range of estimated underlying consumption growth on the order of 2.5 to 3 percent.

Gasoline deliveries were down for the second month in a row—though, unlike April's decline, May's decrease primarily represents strong deliveries a year ago rather than unusually weak deliveries this year. Kerosine jet fuel deliveries were also down from a year ago, despite continued, though perhaps smaller, increases in air traffic than earlier in the year. Against these declines were an over 4 percent rise for distillates and a relatively strong increase for residual fuel oil.

Imports rose over 18 percent or 1.1 million B/D above last May, continuing at over 7 million B/D for the second month in a row. Some of the increases in imports in recent months have gone to meet higher demand and compensate for lower domestic production, but the largest portion of May's increase went into inventories. In the past two months, stocks have risen about 40 million barrels more than usual for April and May and at month-end were 52 million barrels higher than for one year previously. Input to distillation units at refineries was up about 6 percent over last May, though gasoline production was down slightly.

It should be noted that the Department of Energy's revised data for 1987, recently released in the *Petroleum Supply Annual* and incorporated in this report's year-ago data this month, show that deliveries grew more rapidly last year than originally estimated. Growth in total deliveries in 1987 is now put at 2.4 percent, compared with the 1.7 percent previously estimated by DOE; deliveries of the individual major products were revised upwards by from 0.3 to 0.7 percent, with kerosine jet fuel adjusted upwards by 3 percent. Despite the revision in total deliveries for the year ago period, this year's first quarter growth still amounted to an unusually large 5 percent, at least twice as large as the revised year-to-year increases of the immediately preceding quarters.

PRODUCT SUPPLIED[1/]

Gasoline

MAY'S DECLINE DUE PARTLY TO STRENGTH A YEAR AGO.

In May, for the second month in a row, gasoline deliveries fell compared with a year ago. April's decline had been due to weak deliveries following strong growth of over 3 percent in the first quarter. May's 2.2 percent decline, however, was mostly the result of deliveries last May which were above trend by roughly 250 thousand B/D. Adjusted for this, deliveries this May would be up something more than 1 percent—but still less than consumption growth as indicated by the growth in travel. The first quarter's increase in miles traveled nearly matched the 3.8 percent rise of last year, when deliveries where growing at a more than 2 percent rate, and there is little reason to believe that more recent months' growth in travel differs markedly from that of the first quarter.

The increase in travel over the past several years has continued to show regional differences. Although, within regions, the rate of population growth has slowed in some parts of the South and picked up in the Northeast, comparison among regions shows that the southern and western parts U.S. have continued to grow more rapidly than the rest of the country. As a result, according to Department of Transportation data, the South and West account for roughly two thirds of the 1982-1987 increase in U.S. gasoline sales.

Distillates

AFTER APRIL'S DECREASE, MAY'S DELIVERIES REBOUND.

Distillate deliveries rebounded in May, rising 4.3 percent over deliveries of May last year. April's deliveries had fallen, year-to-year, following a sharp increase in the first quarter. Though the year-to-date increase amounts to over 5 percent, we believe that growth in consumption has been less than this. The main source of growth for this fuel continues to be the

API ESTIMATES

	MAY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.1	0.8	17.0	3.3
Crude oil production[2/]	8.2	(1.7)	8.2	(2.7)
Total imports[3/]	7.1	18.2	6.9	16.3
Stocks (million bbl)[3/]	1,068	5.1	na	na

transportation sector. With truck traffic up an estimated 6 percent, based on the overall performance of the economy so far this year, and rail traffic up at least as much, transportation usage is estimated to have been adding 100 thousand B/D or so to consumption growth so far this year. Industrial usage may also be up somewhat, given the strength in industrial output, but most other sectors have little to contribute either way to the year to year change, indicating a growth rate for consumption of roughly 3 percent.

Residual Fuel Oil

DELIVERIES RISE NEARLY 12 PERCENT, YEAR TO YEAR.

Residual fuel oil deliveries for May are estimated to be 1,151 thousand B/D, representing a decline of 14.3 percent from the April level but an increase of 11.9 percent from those of May 1987. Despite the sharp month-to-month decline, the deliveries estimate for May indicates continuing high levels of demand propelled by energy-intensive industrial activity, confirming a pattern of year-to-year increases in the heavy fuel oil market since the beginning of the year. The decline from the previous month, which is substantially greater than the normal seasonal pattern, is the result of strong demand in the industrial sector during April rather than a sign of a slowdown in May. On the other hand, part of the large year-to-year increase can be attributed to the historically low deliveries estimate for May 1987.

As in the previous month, the industrial sector is believed to have been responsible for almost all of the strength in the heavy fuel oil market. In view of the lack of unusual weather conditions, the utility sector is believed to have had only a neutral effect on deliveries.

Kerosine Jet Fuel

TRAFFIC GROWS, BUT DELIVERIES DROP.

Air traffic indicators were already growing less rapidly in this year's first quarter than they were last year, up an estimated 6 percent versus an 8 percent increase in miles flown for all of 1987. So April's weaker showing, at less than 3 percent, suggests that May's increase in traffic may also have been smaller than those earlier in the year. Even so, consumption is likely continuing to grow—even though May's deliveries were not particularly strong. After increasing year-to-year in each month so far in 1988, deliveries were down 2.3 percent in May compared with a year ago.

The Department of Energy's revised data for 1987, including data on imported jet fuel that had earlier escaped collection, falls more into line with air traffic patterns than did the earlier estimate. Previous DOE data had shown a 3.6 percent increase in deliveries for last year, less than half the increase in miles flown, while the revised data show a nearly 7 percent increase in deliveries. Allowing for some improvement in fuel efficiency due to replacements and additions to the aircraft fleet, the correspondence with air traffic growth is greatly improved.

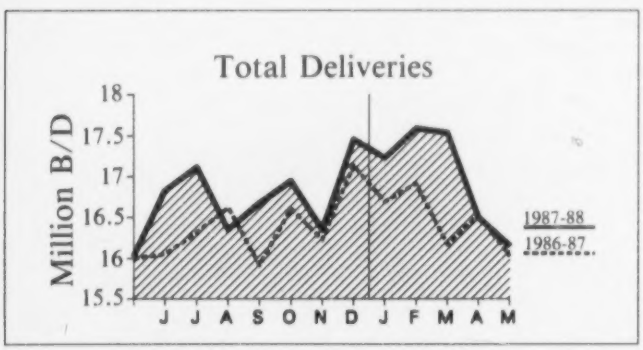
Other Oils

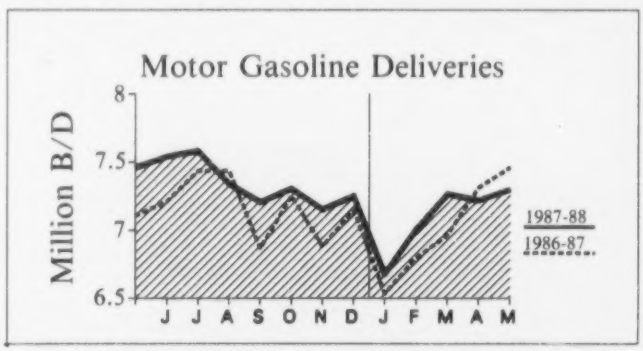
ONLY MODEST GROWTH FOR MAY.

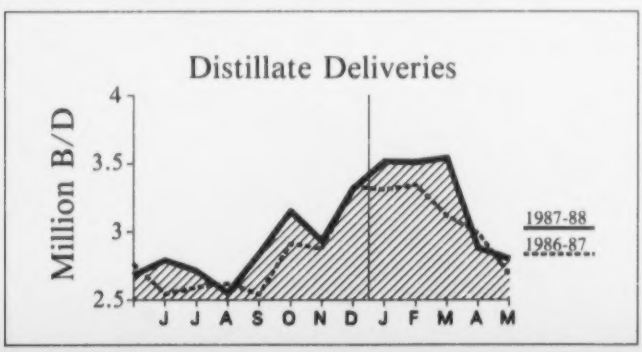
Deliveries of other oils for May were estimated to be 3,831 thousand B/D, representing only a 0.9 percent increase from last May and a decline of 1.5 percent from the previous month. The decrease contrasts with a normal seasonal increase of more than 5 percent.

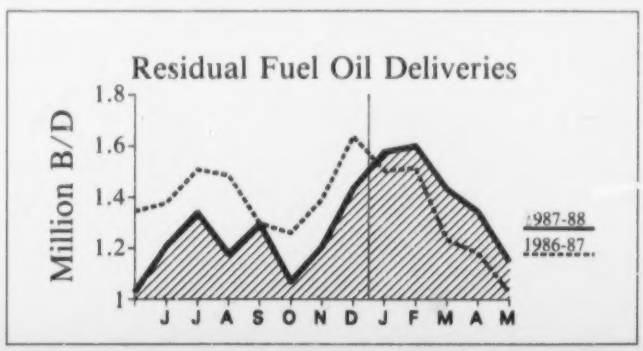
Part of the continued slowdown in year-to-year increases is believed to be the result of ongoing supply problems in the petrochemical markets. Despite maintenance and repairs at some olefin plants, most operating petrochemical plants were reported to have operated at close to capacity. This apparent tightness is believed to have contributed to a small but perceptible shift in feedstock preference. Pure ethane, the preferred feedstock, currently commands a premium; propane, which continues to be the cheapest ethylene feedstock, produces by-products whose demand has been declining.

Despite the good weather during most of the month, asphalt and road oil markets are reported to be substantially behind









last year's levels in many parts of the country. These products, which normally account for the substantial upswing in other oils' deliveries each May, may be the principal reason for this year's counterseasonal decline in May deliveries of other oils. East Coast asphalt activity is believed to have been especially slow, but Mid-Continent deliveries reportedly picked up during the latter part of the month after a slow start.

SUPPLY[1/]

Production

DECLINE CONTINUES. May's crude oil production fell 145 thousand B/D from one year earlier, a 182 thousand B/D decline in the lower 48's output being only partly offset by a 37 thousand B/D increase for Alaska.

Though the number of producing wells has declined by only about 4 percent since the oil price decline of 1986, production from many existing wells has dropped due to natural decline and less favorable economics for well servicing, maintenance, and enhanced recovery projects. Well servicing activity, in particular, though higher than some of the lows reached during the past two years, has been running nearly 30 percent below the levels of the first part of 1985. The net effect of this, combined with drilling rates at only half those as recent as three years ago, has been a decline in overall U.S. production of 1 million B/D in a little over two years.

Imports

AT OVER 7 MMBD, IMPORTS ARE UP OVER 18 PERCENT. Imports continued at over 7 million B/D in May for the second month in a row. Year to year, imports are up more than 18 percent—though with a 145 thousand B/D decline in production and only a 123 thousand B/D rise in deliveries for the month, much of the increase went into inventories.

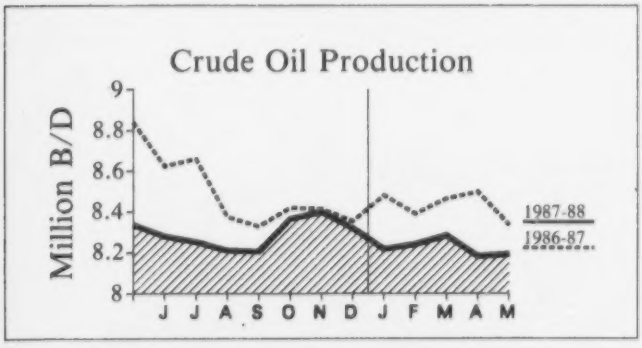
As in prior months, by far the largest part of the May increase was in crude oil, which rose over 900 thousand B/D to provide feedstock for refineries' increased runs and to compensate for declining U.S. production. Also as with prior months, most of the 180 thousand B/D increase in product imports was not in the major products; imports of gasoline and components, as well as distillates, were close to last May's level, while residual fuel oil imports declined slightly.

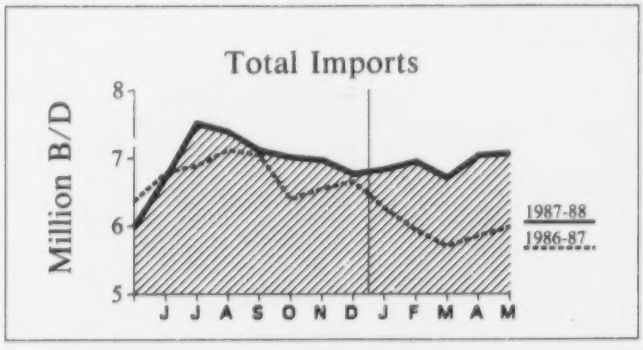
Refinery Operations

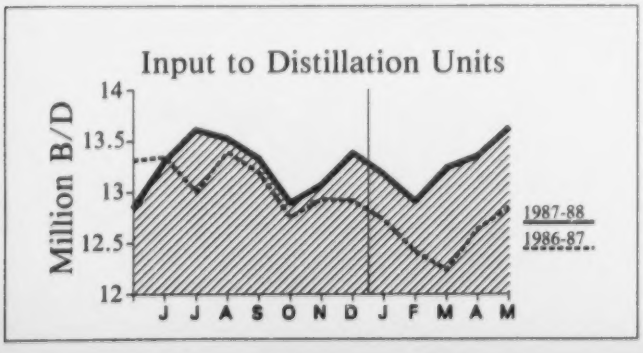
UTILIZATION OF OPERATING CAPACITY ABOVE 90 PERCENT. As has been the case so far this year, refinery input has continued to show gains versus the year ago period. For May, the increase was 6.1 percent over last May. Utilization of operable capacity rose 2.6 percentage points to over 85 percent.

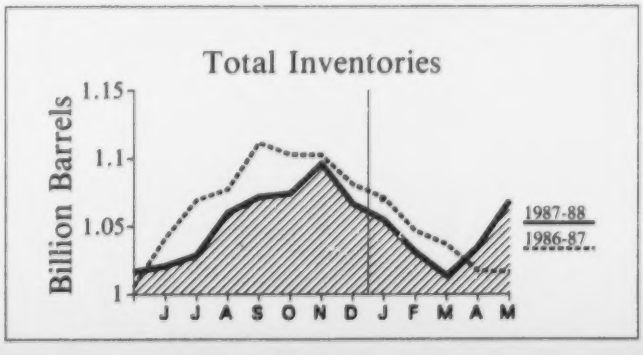
It should be noted that "operable capacity", by definition, includes distillation capacity which can be put into operation within 30 days, or, if under repairs, within 90 days; the capacity of downstream units for the production of gasoline or other products, whether in operation or undergoing repairs or maintenance, are not directly involved in the calculation except to the extent that they may constrain what can be run through the initial distillation step. Thus, after accounting for more than 1 million B/D of operable but idle capacity, utilization of capacity actually operating probably exceeded 90 percent in May; utilization of downstream units was likely at least as high, if not higher.

Gasoline production was down about 2 percent from last May, though distillate jumped nearly 14 percent and residual fuel oil, over 12 percent, as yields on these products rose from last May's lower-than-typical rates.









Inventories

STOCKS UP 40 MMB MORE THAN AVERAGE FOR APRIL AND MAY. Total stocks rose 34 million barrels in May to a level 52 million barrels higher than a year ago. In the past two months, inventories have risen 55 million barrels, contrasted with a recent historical average for April-May of about 15 million barrels. Crude oil stocks, at 362 million barrels, continued at levels near the high end of the range of the last several years. Gasoline inventories declined 5 million barrels, and were within the range of May inventories of recent years; distillate stocks rose, a not uncommon occurrence for May, by 7 million barrels.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 548 million barrels as of May 31, 1988).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	MAY			YEAR-TO-DATE		
	1988[1]	1987[2]	% Change	1988[3R]	1987[2]	% Change
Products Supplied:						
Total motor gasoline	7,299	7,460	(2.2)	7,094	7,016	1.1
Finished leaded motor gasoline*	1,394	1,891	(26.3)	1,395	1,803	(22.6)
Finished unleaded motor gasoline*	5,905	5,569	6.0	5,699	5,213	9.3
Naphtha-jet	213	189	12.7	211	191	10.5
Kerosine-jet	1,092	1,118	(2.3)	1,219	1,169	4.3
Distillate fuel oil	2,800	2,684	4.3	3,249	3,085	5.3
Residual fuel oil	1,151	1,029	11.9	1,420	1,289	10.2
All other oils[4]	3,831	3,798	0.9	4,038	3,917	3.1
Reclassified[5]	- 237	- 252	(6.0)	- 241	- 215	12.1
Total domestic products supplied	16,149	16,026	0.8	16,990	16,452	3.3
Exports	852	666	27.9	866	783	10.6
Total products supplied	17,001	16,692	1.9	17,856	17,235	3.6
Supply:						
Domestic production:						
Crude oil[6]	8,191	8,336	(1.7)	8,205	8,434	(2.7)
Natural gas liquids	1,603	1,585	1.1	1,595	1,594	0.1
Other supply[7]	1,225	769	59.3	1,149	833	37.9
Total domestic supply	11,019	10,690	3.1	10,949	10,861	0.8
Imports:						
Crude oil, total	5,154[10/]	4,248[10/]	21.3	4,833[10/]	4,028[10/]	20.0
Canadian	669	673	(0.6)	671	585	14.7
Other	4,485	3,575	25.5	4,162	3,443	20.9
Products, total	1,912	1,732	10.4	2,084	1,919	8.6
Residual fuel oil	488	505	(3.4)	633	581	9.0
Other	1,424	1,227	16.1	1,451	1,338	8.4
Total imports	7,066	5,980	18.2	6,917	5,947	16.3
Total supply	18,085	16,670	8.5	17,866	16,808	6.3
Stock change, all oils	+1,084	- 22	XXXX	+ 10	- 427	XXXX
Refinery Operations						
Input to crude oil distillation units	13,629	12,848	6.1	13,260	12,575	5.4
Operable capacity	16,016	15,565	2.9	15,944	15,561	2.5
Refinery utilization (%)[8]	85.1%	82.5%	3.2	83.2%	80.8%	3.0
Crude oil runs	13,423	12,653	6.1	13,069	12,423	5.2

Stocks (millions bbls.)	1988		1987[2]	% Change from ...	
	May 31[9]	Apr 30[9]	May 31	Previous Month	Year Ago
Crude oil[10/]	362.0	357.2	324.7	1.3	11.5
Unfinished oils	109.7	103.2	102.0	6.3	7.5
Total motor gasoline**	224.4	228.9r/	234.9	(2.0)	(4.5)
Finished leaded motor gasoline*	45.0	47.0	57.6	(4.3)	(21.9)
Finished unleaded motor gasoline*	143.4	145.7	138.4	(1.6)	3.6
Naphtha-jet	6.5	6.7	8.1	(3.0)	(19.8)
Kerosine-jet	38.3	38.2	39.3	0.3	(2.5)
Distillate fuel oil	101.4	94.4	101.3	7.4	0.1
Residual fuel oil	42.9	41.3	40.4	3.9	6.2
All other oils	183.2	164.9r/	165.9	11.1	10.4
Total all oils	1,068.4	1,034.8r/	1,016.6	3.2	5.1

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-March, U.S. Department of Energy, April-May, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.